EDITORIAL.

THAT the rapid growth of special scientific nomenclatures is a serious burden is felt by every scientific worker. Any effort, accordingly, toward harmonizing conflicting usage should be and is welcome. Not every such effort necessarily produces final results, but if systematically pursued, it can hardly fail to eliminate some confusion. In the work of the United States Geological Survey decisions are constantly required of questions relating to the naming and correlating of geologic formations. In many instances the available evidence is so conflicting or so meager as to preclude final judgment. Nevertheless, if geologic work is to go on, and maps are to be made, a definite usage must in each case be authorized. These decisions establish precedents, which from time to time receive formal statement by the director and become rules. Such a code, if we may borrow the legal term, was published in the *Tenth Annual Report* of the Survey, and in the *Twenty-fourth Report* is republished, revised, and enlarged by the incorporation of the precedents established in the last thirteen years, together with certain other changes recommended by the committee charged with the revision.

In the new rules there are many minor and some major changes from the old. The action of the committee has been conservative in some directions and radical in others. In part the changes are seemingly retrogressive, though it is to be remembered that a wise progression never hesitates to abandon a position which experience has proved untenable. The return to the use of "Tertiary," "Quaternary," "Triassic," and the adoption of "Ordovician" as a systematic term, with the recognition of the quadruple Lyellian divisions of the first-named are movements which will bring the publications of the survey into closer harmony with those of other organizations, and are fully warranted by the developments of the last decade. The extension of the criteria for the recognition of formations so as to include

physiographic data, and to allow fossils to be used for discrimination as well as for correlation, will, it is believed, be generally approved. To meet the practical difficulties of mapping, lithologic units smaller than formations may, when sufficiently important, be separately mapped as members or lenses. An effort is to be made to conform in the general plan of mapping to the logical categories of (*a*) sedimentary, (*b*) igneous, (*c*) metamorphic rocks. Surficial rocks of all ages are treated as a subclass of sedimentaries, but are to be distinguished by patterns in mapping on a genetic basis. The stratified rocks of the Archean and Quaternary are given distinctive colors. There are many other changes apparent when the old and new rules are compared.

Rules of nomenclature will not, unfortunately, be consistently applied if the interpretation be left entirely to each individual worker. To meet the necessities of the present case a Committee on Geologic Names has been constituted, to consider and decide the various difficulties which will inevitably arise in the varied work of the Geological Survey. This committee is charged with the inspection of all papers written by any member of the Survey corps, and as part of its work keeps a complete card catalogue of all formation names proposed or used in writings relating to American geology.

The closer co-operation of the various individuals and organizations concerned in the advancement of geologic science in this country is surely desirable, and much misunderstanding and unproductive effort can certainly be eliminated if common usage of geologic formation names can be brought about. While a committee from the Survey, representing as it does only a part, even though the larger part, of American geologists, can in the nature of the case, have no authority over the publications of geologists not belonging to its own corps, yet it is hoped that general appreciation among geologists of the advantages of so doing will induce individual and independent workers to avail themselves of its functions, and to conform, when possible, to the usages of the large body of their geological colleagues governed by its decisions. H. F. B.